Perception of the probability of Korean unification amongst South Korea's elderly population

Sylvia Szabo[1], CDFMR, Samuel Danaa[2], CMR, Geonwoo Park[3], DMR, Sangmi Choi[4], MR

[1,4]*Dongguk University (Seoul),* Department of Social Welfare Counselling, College of Future Convergence, Seoul 04620, South Korea, [1]e-mail: sylviaszabo@dongguk.edu (*corresponding author*), https://orcid.org/0000-0001-8985-9118; [4]https://orcid.org/0000-0003-2249-8893; [2]*Yonsei University,* BK21 FOUR Education and Research Group (Alumni), 231, Eui-gwan, Mirae Campus, 1 Yonsei-gil, Heungeop-myeon, Wonju-si, South Korea, e-mail: danaasamuel17@gmail.com, https://orcid.org/0000-0003-4517-3055; [3]*Sungkyul University,* 53, Seonggyeoldaehak-ro, Manan-gu, Anyang-si, Gyeonggi-do, South Korea, email: miryang88@yonsei.ac.kr, https://orcid.org/0000-0002-8943-4037

How to cite:
Szabo, S., Danaa, S., Park, G. & Choi, S. (2022). Perception of the probability of Korean unification amongst South Korea's elderly population. *Bulletin of Geography. Socio-economic Series*, 55(55): 81-93. DOI: http://doi.org/10.12775/bgss-2022-0006

Abstract. While Korean unification remains one of the most significant issues in inter-Korean and international affairs with significant implications in terms of territorial order and geopolitics, little is known about the perception of the likelihood of Korean unification, especially amongst the elderly population. Yet, the proportion of this population in South Korea has been rapidly rising, making it an increasingly important civic group. In this study, we analysed the data from the 2018 nationally representative Korean Longitudinal Study of Aging survey using ordered logistic regression modelling. The results show that geographical location, age, life satisfaction, health status and participation in social activities are the most important factors affecting the perception of possible Korean unification. We also find some gender differences in relation to the impact of education and wealth. Further interdisciplinary studies and spatial analyses might be useful to gain an in-depth understanding of people's perceptions, as well as possible socio-economic and cultural barriers to a potential pre-unifying process.

Contents:

1. Introduction

Unquestionably, Korean unification remains one of the most significant concerns in inter-Korean and international affairs. In a speech on 15 August 2019 to mark the 74th anniversary of Korea's liberation from Japan's 1910–45 rule, South Korea's president, Moon Jae-in, vowed to achieve the unification of the Korean Peninsula by 2045, a century after the end of World War II (*The Guardian*, 2019). A growing number of South Koreans have expressed their interest in the unification of the two nations; however, the age cohort breakdowns show a unique feature (Kim et al., 2018). In the past, both South and North Koreans considered themselves ethnically and traditionally homogeneous people and a unified nation-state.

For instance, in the face of numerous provocations of North Korea in the course of recent times, South Koreans' perception of the North has not significantly changed, as a majority of South Koreans still view their North Korean counterparts as the same people and neighbours (Kim et al., 2018). Over the past decades, since the Korean War in the 1950s, the two Koreas have become radically different in their social, political, ideological and economic systems. South Koreans' perception of North Korean threats clearly influences their perception on the unification of the two nations in a significant way (Kim et al., 2018).

Ever since the extraordinary meeting between the South Korean President Moon Jae-in and his North Korean counterpart Kim Jong Un in April 2018, there has been a growing measure of confidence among watchers across the Korean Peninsula, suggesting the prospects of a peaceful relationship towards an ultimate unification. Data from the Korean General Social Survey (KGSS) for 2003 to 2012 reliably shows that a majority of about 67%-plus of people asserts that unification is somewhat or very necessary, with disparity based on age and political ideology (Rich, 2019; KGRS, 2013). Similarly, research data from the Asan Institute for 2011 to 2014 discovered comparable margins of over 70% expressed their interest in reunification, with respondents in the 2010 Asan survey expressing a slight majority of about 52.6%, even after the sinking of the South Korean submarine Cheonan, which was attributed to a North Korean torpedo

(Rich, 2019; Jiyoon et al., 2015). Arguments about perceptions of Korean unification are pervasive in South Korean survey research, demonstrating that most South Koreans support the unification.

There is a growing recognition amongst experts and officials that an ultimate unification of the Korean Peninsula is an inevitable goal in the future, even though there is no expectation that the unification will happen anytime soon. This is because any premature attempt to endorse a unification is considered perilous and tactically ill-advised. Proponents have identified three priority interests' areas on which the unification of the Korean Peninsula hinges, namely, maintaining peace, preserving stability, and promoting denuclearisation. Analysts maintain that eschewing war and safeguarding stability on the Peninsula remains a key priority. Moreover, experts predict that a unified Korea would emerge as an independent force that would establish equal and normal relationships with international powers, creating a more stable security situation in the Northeast Asian region (Glaser & Sun, 2015). Besides, the economic development of an all-inclusive Korean Peninsula can offer a great boost to regional economic development and cooperation while promoting stronger economic cooperation among countries (Chen, 2012).

Several studies have attempted to access varying aspects of the unification of the two Koreas. Most findings from these studies have consistently found a majority of people supporting the idea of unification based on a number of factors. For instance, some have tried to provide an analytical understanding of the costs and benefits of Korean unification from political, social, and economic aspects (Noland et al., 1998). Studies on South Korean youths' perceptions of North Korea and unification have argued that South Koreans' perception of the threats from the North directly affects their perception of North Korea and ultimate unification (Kim et al., 2018). Other studies have assessed South Korean perceptions of unification (Rich, 2019), including the psychosocial aspects of Korean reunification based on the explicit and implicit attitudes and identities of South Koreans and North Korean defectors (Kim et al., 2001). While several factors and motivations on citizen's perceptions may account for South Koreans perceptions as a whole – be it social, political, economic or cultural – on

their desire for unification, these existing studies provide limited information on a key constituent of society, namely the elderly.

Despite a growing body of literature that has focused on assessing and highlighting South Korean public opinion and perceptions of unification, there are unusually few attempts made to thoroughly investigate how the elderly in South Korean society perceive the call for a unified Korean Peninsula. Yet, the perception of unification among the elderly is critical, in that the proportion of the elderly population has been rapidly increasing and their political influence also has grown (Lee, 2014). In order to be able to contribute to narrowing this yawning research gap on the limited information on the perceptions of the elderly for a more inclusive analysis, this study seeks to provide new evidence to address these key research questions, thus, (I) to what extent are South Korean elderly in support of the unification of the Korean Peninsula; and (II) what are the determining factors that influence the perceptions of the elderly on Korean unification.

Based on a key research objective of assessing the perception of South Korea's elderly population on Korea's unification and the factors that influence their perception on unification, this study will ultimately contribute to contemporary literature and policy on the ongoing debate on the unification of the Korean Peninsula. This paper's contribution will

mainly focus on providing an in-depth perspective into a key segment of the Korean population who are elderly and have several decades of experience in Korea's development history. The paper contributes to geographical literature by examining the spatial differential in the perceptions towards a possible unification, which would itself involve a process of altering territorial arrangements. The findings of this paper are also expected to enrich the ongoing discussion on how the elderly perceive Koreas' unification and how these perceptions translate into significant policy recommendations for a unified Korea.

2. Data and methods

2.1. Data and key variables

We used secondary data from the Korean Longitudinal Study of Aging (KLoSA). We used the data from the most recent 7th wave of the survey conducted in 2018. KLoSA is a periodic and structured survey organised by the Korea Employment Information Service (KEIS). It applies a multi-stage, stratified probability sampling using census-based enumeration districts (EDs), place of residence, and type of accommodation (Lee et al., 2018). Since 2006, the survey has been conducted

Table 1. Description and units of measurement of variables used in the study

Variables	Descriptions and measurement
Perception of unification	Perception of the likelihood of unification in the next 10 years (0 – unlikely, 1 – somewhat likely, 2 – likely)
Age	Respondent's age (1 above 65, 2 – above 80)
Gender	Respondent's gender (1 – female, 2 – male)
Education	Respondent's education (1 – primary or lower, 2 – middle school, 3 – high school, 4 – university)
Income	Wealth quintile (1 – lowest, 5 – highest)
Employment status	Respondent's employment status (1 – working, 2 – not working)
Perceived socio-economic status	Respondent's perceived socio-economic status (1 – lowest, 6 – highest)
Life satisfaction	Respondent's perceived life satisfaction (0 – low, 1 – medium, 2 – high)
Participation in social activities	Respondent's participation in social activities (1 – yes, 2 – no)
Region	Rural or urban (1 – rural, 2 – urban)

Source: own elaboration

every two years and covers all South Korea except Jeju Island. Originally, the survey covers the population aged 45 and more; however, for the purpose of our analysis, only respondents aged 65 and older were considered.

The outcome variable in this study is the variable measuring the perception of the likelihood of Korean unification in the ten years following the survey. The variable is based on the question: "Within the coming years, do you think that north–south unification will be possible?" Unification is understood as the political moment when the two countries become politically one country. In our dataset, this is a categorical variable with 0 indicating lowest likelihood, 1 – medium likelihood, and 2 – high likelihood. The main explanatory variables include frequently used socio-economic and demographic characteristics of the respondents (e.g. Ha & Jiang, 2016; Ham, 2017), such as income, level of education, age, geographical location, and self-perceived health status. The categorisation of the age variable was based on the United Nations' cut-off point of 80 years old (UN, 2019), In addition, we hypothesise that life satisfaction is likely to be positively associated with a positive perception of Korean unification. Finally, to test potential gender differences, we also run separate models for male and female respondents.

2.2. Econometric analysis

Given that the outcome variable is a categorical ranked variable, and following previous studies (Szabo et al., 2015; Ahmed et al., 2020), we apply ordinal logistic regression modelling. Ordinal logistic modelling is preferable because the outcome variable is neither continuous nor normally distributed. An ordinal response variable is used when the dependent variable has more than two ordinal ranks. In our study, the dependent variable represents the level of standard measurement scale, such as perception of the possibility of unification within the next ten years (neutral, unlikely, or likely). This model describes the variation in a dependent variable that is measured by the ordered category. While the dependent variable should be ordered, the distance amongst the measured values does not need to be equal. The ologit model estimates

the nonlinear parameter, and it uses maximum likelihood estimation (MLE). The basic logistic regression model is specified as follows.

$$Y_i^* = \beta X_i + \varepsilon i$$

where:
Y_i^* = unobserved outcome variable
X_i = the vector of independent variables
β = the adjacent regression coefficients
εi = residual error term

Given that the level of perception in this study ranges from 0 (lowest likelihood) to 2 (highest likelihood), Y is assumed to be generated by the following:

$$Y = \begin{cases} 1 \text{ if } Yi* \leq \ \mu1 \\ 2 \text{ if } \mu1 \ < \ Yi* \leq \ \mu2 \\ 3 \text{ if } \mu2 \ < \ Yi* \leq \ \mu3 \\ N \text{ if } \mu N - 1 \ < \ Yi* \leq \ \mu N \end{cases}$$

In order to specifically examine the factors influencing the perception of unification by gender, we applied three separate logistic models to analyse the underlying associations. More specifically, a model that used the complete sample size, a model based on a sample of female respondents and a model based on a sample of male respondents. All analyses were undertaken using STATA 15 (StataCorp, 2015).

3. Empirical results

3.1. Respondent characteristics

Table 2 summarises the key characteristics of the study respondents. Amongst all surveyed individuals, 58.26% (2,546) were women, and 41.74% (1,817) were men. Considering respondent age, 30.12% of all respondents were 80 or older, and the remaining individuals were between 65 and 79 years old. Most respondents (61.11%) declared no religion, while the remaining individuals were either Christian (Protestant or Catholic) or Buddhist. Regarding self-assessed health status, 18.58% considered that their health was either good or very good, while 44.91% thought that their health status was average. Of all respondents, 36.50% stated that

their health was either poor or rather poor. Most respondents (49.29%) had an elementary or lower educational level and were no longer employed (77.28). Meanwhile, 31.5% exercise regularly and 57% participate in social activities. Regarding life satisfaction, 9.67% of all respondents reported low life satisfaction, 70.76% reported medium life satisfaction, and 19.57% stated high life satisfaction.

Table 2. Characteristics of sample

Gender	Frequency	Percent
Female	2,536	58.26
Male	1,817	41.74
Age		
65–79	3,042	69.88
80 and more	1,311	30.12
Religion		
No	2,660	61.11
Yes	1,693	38.89
Participating in a social activity		
No	1,872	43
Yes	2,481	57
Marital status	Frequency	Percent
Not married	1,268	32.39
Married	926	67.61
Health status		
Very good or good	809	18.58
Average	1,955	44.91
Rather poor or poor	1,589	36.5
Level of education		
Elementary school or lower	1,960	49.29
Middle or high school	1,697	41.44
University	369	9.28
Currently employed		
Yes	989	22.72
No	3,364	77.28
Life satisfaction		
Low	421	9.67
Medium	3,080	70.76
High	852	19.57
Region		
Standard Metropolitan Area	2,230	56.09
Gyeongsang	551	13.85
Jeolla	613	15.41
Chungcheong	431	10.84
Gangwon	151	3.8
Total	3,976	100

Source: own elaboration

Most respondents (56.09%) lived in the Seoul Metropolitan Area (SMA).

3.2. Determinants of perceptions of Korean unification probability amongst the elderly

Table 3 summarises the results of the independence test (chi-square test) between the selected categorical (explanatory variables) and the likelihood of Korean unification. With regards to age, 35.21% of the "super elderly" (those aged >80) considered that near-future Korean unification was very unlikely, compared to 32.72% of the elderly aged 65–80. Of those respondents who declared practiscing a religion (Buddhism or Christianity) 30.38% perceived Korean unification as highly likely, compared to 25.1% of those who did not declare any religious belonging. There were considerable and significant differences across self-reported health status and life satisfaction groups. Those respondents who declared being in very good or good health (36.46) and having high life satisfaction (39.91) thought that near-future Korean unification was highly likely. Finally, compared to other survey participants, those respondents who regularly participated in social activities were also found to be significantly more likely to believe in a near future Korean unification.

Results of the six logit regression models are summarised in Table 4. The first two models show the results for the total sample, models 3 and 4 present the results for the female respondents, and models 5 and 6 summarise the results for the male respondents. Based on the results in model 1, we can see that age, income, health status, life satisfaction and participation in social activities are all significant predictors of perceiving the probability of Korean unification. Marital status and employment are insignificant, and income shows some significance for the poor and medium-level income groups (as compared to the poorest). More specifically, compared to the oldest respondents (>80), the younger respondents (65–80) are significantly less likely to believe in the possibility of Korean unification within the next 10 years (OR=0.79, p<0.01).

Respondents with very good and good self-perceived health status and those with high levels of life satisfaction are more likely to be optimistic about the likelihood of Korean unification. For example, compared to respondents with low life satisfaction, the elderly with high life satisfaction were 1.53 times more likely to consider that Korean unification is possible within the next 10 years (OR=1.53, p<0.01). Also, compared to religious respondents, the non-religious were less likely to be optimistic about a near-future Korean unification (OR=0.83, p<0.05). In model 2, we find similar association patterns but observe a strong effect of geographical location (region). When this variable is added as an explanatory variable, some other predictors (e.g., religion) become weaker or insignificant. In terms of the geographical effects, compared with other South Korean regions, respondents living in the Gangwon region are most likely to believe in the likelihood of near-future Korean unification. With Seoul Metropolitan Area (SMA) as a reference category, residents of all other regions are more likely to be optimistic about Korean unification compared to residents of the SMA.

As mentioned previously, models 3 and 4 consider only female respondents. As can be noted, similar to previous models, age, health status, life satisfaction and participation in social activities are significant predictors when it comes to elderly women's perception of Korean unification. Marital status and employment remain insignificant, and income shows some significance only in model 4. The effect of these variables becomes weaker or non-significant when we account for geographical location (model 4). Female respondents with a high level of life satisfaction and good and very good health status are significantly more likely to have a more optimistic view on the possibility of near-future Koran unification. For example, compared to elderly females with low levels of life satisfaction, respondents with a high level of life satisfaction are 1.43 times more likely to believe in such as possibility (OR=1.43, p<0.1). Also, there is a significant positive association between frequent participation in social activities and the perception that Korean unification is likely to happen within the next ten years (OR=1.38, p<0.01). As was the case in the aggregate model, regional effects are strong and compared to respondents from the SMA,

respondents from other regions are more likely to believe in a near-future Korean unification.

Finally, when considering models 5 and 6 (male respondents), it can be noted that compared to the determinants within the female respondents' sample, education and income are more important factors in predicting the perceived probability of Korean unification. For example, male respondents

Table 3. Respondents' socio-economic characteristics and perception of Korean unification

	Low probability N (%)	Medium probability N (%)	High probability N (%)	p-value*
Age				
65–80	429 (32.72)	522 (39.82)	360 (27.46)	0.062
80 and more	1,071 (35.21)	1,098 (36.09)	873 (28.7)	
Gender				
Male	630 (34.67)	644 (35.44)	543 (29.88)	0.069
Female	870 (34.31)	976 (38.49)	690 (27.21)	
Marital status				
Not married	495 (35.26)	547 (38.96)	362 (25.78)	0.033
Married	1,005 (34.08)	1,073 (36.39)	871 (29.54)	
Employment				
No	1,158 (34.42)	1,291 (38.38)	915 (27.2)	0.002
Yes	342 (34.58)	329 (33.27)	318 (32.15)	
Education				
Primary school	835 (35.07)	891 (37.42)	655 (27.51)	
Middle school	260 (34.99)	263 (35.4)	220 (29.61)	0.696
High school	301 (33.59)	337 (37.61)	258 (28.79)	
University	104 (31.23)	129 (38.74)	100 (30.03)	
Religion				
Religious	865 (32.52)	987 (37.11)	808 (30.38)	0
Not religious	635 (37.51)	633 (37.39)	425 (25.1)	
Wealth				
Poorest	322 (38.15)	314 (37.2)	208 (24.64)	
Poor	305 (33.15)	333 (36.2)	282 (30.65)	0.046
Medium	257 (32.53)	302 (38.23)	231 (29.24)	
Rich	262 (32.91)	287 (36.06)	247 (31.03)	
Richest	234 (37.38)	217 (34.66)	175 (27.96)	
Health Status				
Very good or good	214 (26.45)	300 (37.08)	295 (36.46)	0
Average	592 (30.28)	735 (37.6)	628 (32.12)	
Rather poor or poor	694 (43.68)	585 (36.82)	310 (19.51)	
Life satisfaction				
High	277 (32.51)	235 (27.58)	340 (39.91)	
Medium	1,034 (33.57)	1,227 (39.84)	819 (26.59)	0
Low	189 (44.89)	158 (37.53)	74 (17.58)	
Participation in social activities				
No	735 (39.26)	720 (38.46)	417 (22.28)	0
Yes	765 (30.83)	900 (36.28)	816 (32.89)	

* Chi-square test of independence; p<0.1, ** p<0.05, *** p<0.01
Source: own elaboration

Table 4. Factors affecting perception of Korean unification by respondents' gender

DV=unification probability (high likelihood)	model 1 (total sample) OR (CI)	model 2 (total sample) OR (CI)	model 3 (female respondents) OR (CI)	model 4 (female respondents) OR (CI)	model 5 (male respondents) OR (CI)	model 6 (male respondents) OR (CI)
Age						
65 to <80	0.79 (0.68; 0.93)***	0.86 (0.73; 1.01)*	0.78 (0.63; 0.96)**	0.84 (0.68; 1.05)	0.81 (0.63; 1.02)*	0.88 (0.68; 1.14)
Ref: 80+						
Marital status						
Married	1.00 (0.85; 1.18)	0.94 (0.79; 1.11)	0.93 (0.76; 1.13)	0.99 (0.81; 1.20)	1.15 (0.77; 1.71)	1.05 (0.71; 1.55)
Ref: not married						
Employment						
Yes	0.87 (0.73; 1.03)	0.87 (0.73; 1.04)	0.83 (0.64; 1.08)	0.81 (0.63; 1.05)	0.91 (0.71; 1.17)	0.93 (0.72; 1.18)
Ref: no						
Education						
Middle or high school	0.83 (0.71; 0.97)**	0.92 (0.78; 1.08)	0.98 (0.79; 1.23)	0.89 (0.72; 1.11)	0.78 (0.61; 1.00)**	0.86 (0.67; 1.12)
University	0.84 (0.64; 1.10)	0.96 (0.72; 1.26)	1.36 (0.77; 2.38)	1.12 (0.65; 1.93)	0.78 (0.56; 1.09)	0.88 (0.62; 1.26)
Ref: primary school or lower						
Religion						
Religious	0.86 (0.75; 0.98)**	0.94 (0.82; 1.09)	0.92 (0.77; 1.10)	0.83 (0.70; 1.00)**	0.87 (0.70; 1.10)	0.96 (0.77; 1.21)
Ref: no religion						
Wealth						
Poor	1.26 (1.03; 1.54)**	1.24 (1.01; 1.53)**	1.24 (0.95; 1.61)	1.26 (0.97; 1.62)*	1.31 (0.93; 1.84)	1.28 (0.89; 1.84)
Medium	1.23 (1.00; 1.53)*	1.21 (0.97; 1.51)*	1.09 (0.82; 1.44)	1.12 (0.85; 1.47)	1.42 (0.99; 2.03)*	1.40 (0.96; 2.04)*
Rich	1.10 (0.89; 1.35)	1.16 (0.93; 1.44)	1.17 (0.88; 1.54)	1.11 (0.85; 145)	1.12 (0.79; 1.58)	1.18 (0.81; 1.71)
Richest	0.84 (0.66; 1.06)	0.96 (0.75; 1.22)	0.95 (0.70; 1.29)	0.80 (0.60; 1.08)	0.89 (0.60; 1.32)	0.96 (0.64; 1.46)
Ref: poorest						
Health status						
Average	0.81 (0.67; 0.97)**	0.78 (0.64; 0.94)**	0.84 (0.64; 1.11)	0.86 (0.65; 1.12)	0.76 (0.59; 0.99)**	0.72 (0.55; 0.95)**
Rather poor or poor	0.45 (0.37; 0.55)***	0.49 (0.39; 0.60)***	0.53 (0.39; 0.72)***	0.49 (0.37; 0.66)***	0.40 (0.29; 0.54)***	0.43 (0.31; 0.59)***
Ref: good or very good						
Life satisfaction						
Medium	1.23 (0.95; 1.58)	1.23 (0.94; 1.61)	1.16 (0.84; 1.60)	1.20 (0.89; 1.62)	1.27 (0.79; 2.03)	1.37 (0.83; 2.24)
High	1.53 (1.13; 2.08)***	1.37 (0.99; 1.88)*	1.43 (0.96; 2.14)*	1.62 (1.10; 2.37)**	1.43 (0.84; 2.44)	1.32 (0.76; 2.31)
Ref: low						
Participation in social activities						
Yes	1.35 (1.18; 1.55)***	1.27 (1.10; 1.46)***	1.38 (0.96; 2.14)***	1.43 (1.20; 2.34)***	1.22 (0.98; 1.51)*	1.10 (0.87; 1.38)
Ref: no						
Region						
Gyeongsan		1.86 (1.54; 2.26)***		1.82 (1.41; 2.36)***		1.93 (1.44; 2.60)***
Jeolla		1.60 (1.32; 1.92)***		1.57 (1.23; 2.01)***		1.64 (1.22; 2.20)***
Chungcheong		3.98 (3.26; 4.87)***		3.31 (2.58; 4.24)***		5.21 (3.73; 7.27)***
Gangwon		10.86 (7.71; 15.31)***		11.02 (7.15; 17.00)***		11.18 (6.49; 19.26)***
Ref: SMA						
Cut 1	-0.83 (-1.16; -0.51)	-0.39 (-0.75; -0.04)	-0.83 (-1.25; -0.40)	-0.40 (-0.87; 0.06)	-0.73 (-1.32; -0.13)	-0.25 (-0.88; 0.38)
Cut 2	0.79 (0.50; 1.13)	1.37 (1.00; 1.73)	0.87 (0.44; 1.29)	1.40 (0.92; 1.87)	0.84 (0.24; 1.44)	1.47 (0.83; 2.10)
N	n=3,976	n=3,976	n=2,307	n=2,307	n=1,669	n=1,669
Wald chi2	Wald chi2(19) = 153.04	Wald chi2(19) = 496.69	Wald chi2(19) = 101.62	Wald chi2(19) = 283.22	Wald chi2(19) = 66.72	Wald chi2(19) = 242.59
P	p>0.01	p>0.01	p>0.01	p>0.01	p>0.01	p>0.01

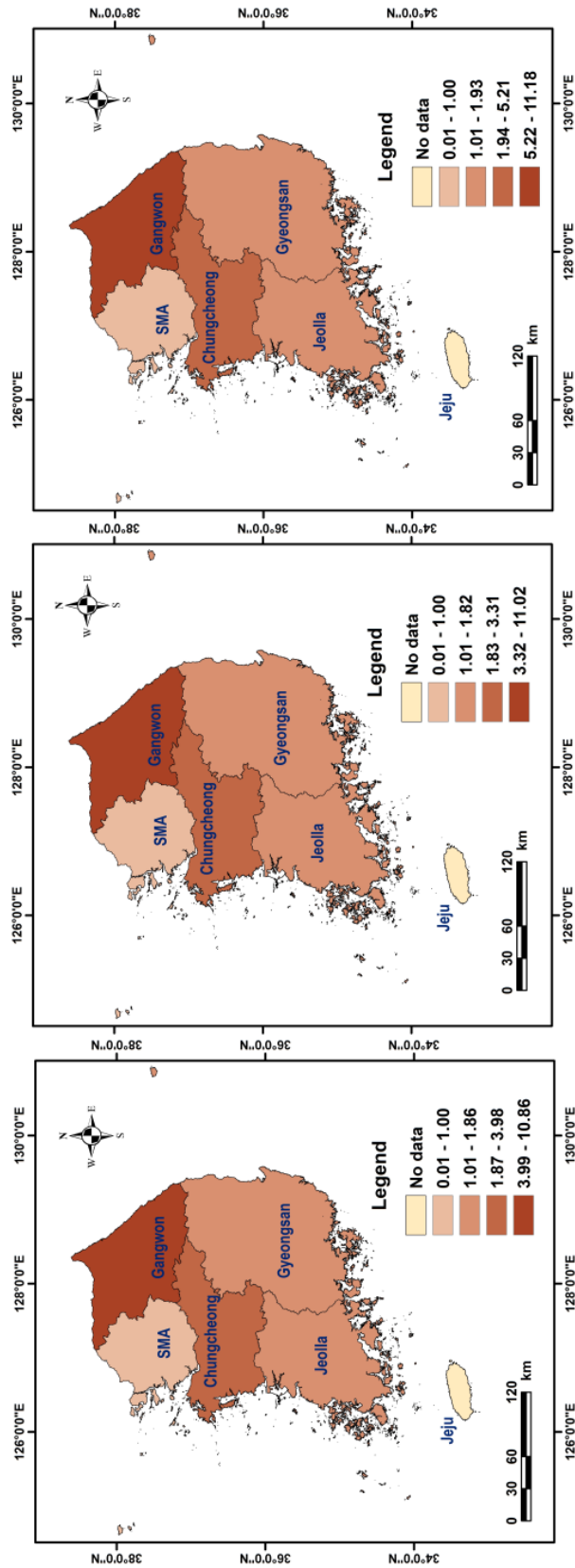* p < 0.1, ** p < 0.05, *** p < 0.01
Source: own elaboration

Fig. 1. Perception of Korean unification (ORs) by all respondents (left), female (middle), and male (right) respondents in the Korean region
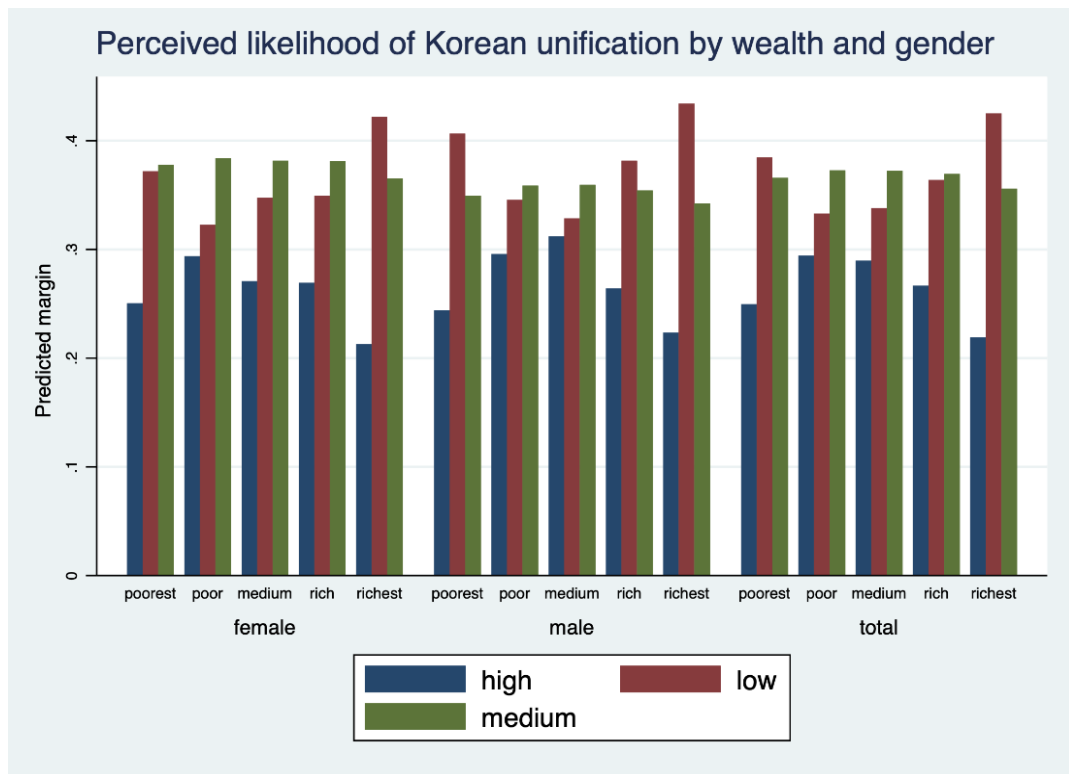Source: authors' own elaboration

Fig. 2. Predicted probabilities of perceived likelihood of Korean unification by wealth and gender.
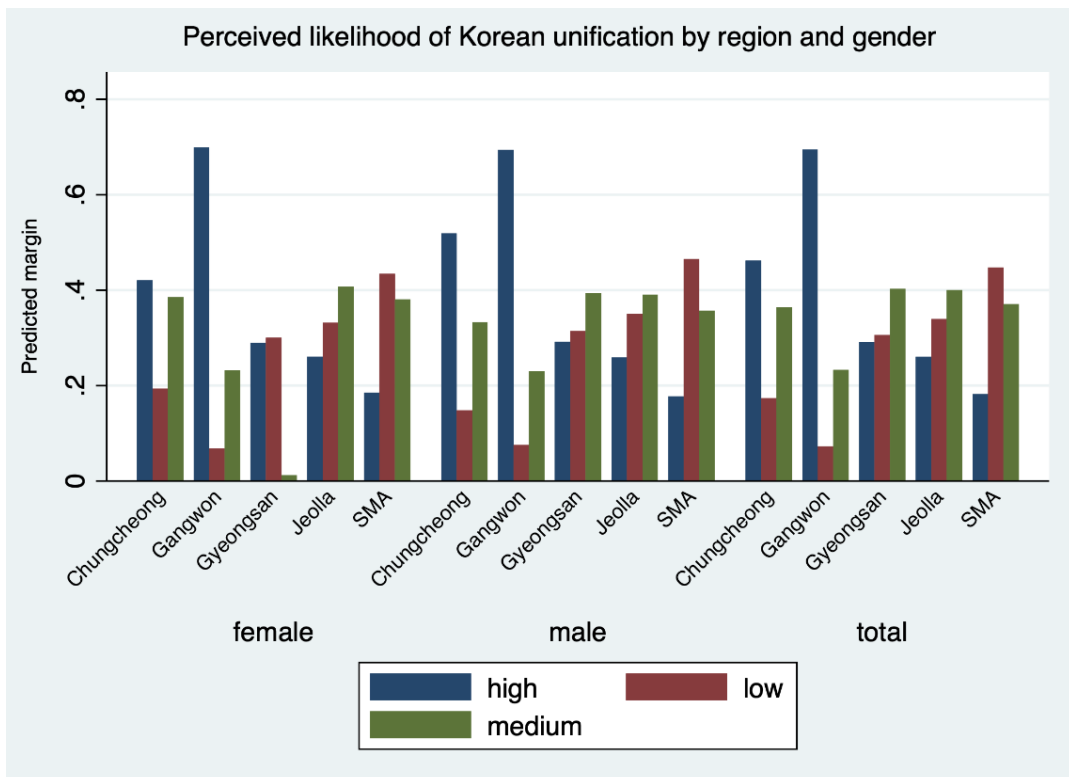Source: KLoSA (2018)

Fig. 3. Predicted probabilities of perceived likelihood of Korean unification by region and gender.
Source: KLoSA (2018)

with middle and high school education are significantly less likely to believe in a near-future Korean unification compared to respondents with primary education or lower (OR=0.73, p<0.05). Also, within the male sample, compared to the poorest respondents, respondents with medium levels of income are significantly more likely to have a positive perception of the likelihood of Korean unification (OR=1.42, p<0.1). This pattern is similar to that of the overall sample. Considering other factors, age, health status and participation in social activities are all positively associated with the perceived likelihood of unification. In model 6, similar to models 2 and 4, we observe strong regional effects.

In addition to the regression results, Fig. 1 illustrates the model-based odds ratios by region and gender, while Fig. 2 and Fig. 3 illustrate the predicted probabilities for the combinations of income-and-gender and regions-and-gender. As can be seen (Fig. 2), the overall highest predicted probability of the negative outcome (low probability of Korean unification) is associated with the group of richest respondents. The probability of such an outcome varies between 0.42 and 0.43, depending on the sample. The predicted probabilities of the positive outcome (near-future Korean unification) are highest amongst the medium income groups. Considering the regional effects (Fig. 1 & Fig. 3), it can be observed that residents of the Gangwon province are most optimistic about a near-future Korean unification, with probabilities of a positive outcome ranging from 0.69 to 0.70 (Fig. 3).

4. Discussion and conclusion

This study contributes to contemporary geographical and socio-economic literature on the ongoing debate on the unification of the Korean Peninsula by assessing the perceptions of South Korea's elderly population regarding the likelihood of Korea's near-future unification and the factors that influence those perceptions. This is particularly significant as the current literature focuses on the younger populations, such as university students and geographical differentials are generally not examined.

The significant relationship between age, income, and health status with the perceived probability of Korean unification suggests that many South Korean elderly still hope that they can be reunited with their North Korean relatives who have been separated since the Korean War that split the peninsula in two. The findings also indicate that for the South Korean elderly, remaining socially active provides the opportunity to exchange views with their peers and perhaps a greater need to be engaged in societal matters. The lower belief in the possibility of Korean unification within the next ten years among younger respondents (65–80) might stem from their understanding of the current political situation between the two nations, as well as the failed Kim–Trump Summit in 2019. The statistical non-significance of religious affiliation (or lack of thereof) suggests that involvement in religious activities does not make any difference when it comes to the perception of the probability of unification.

The findings of our study are largely in line with some existing research on this topic. For example, Park (2015) conducted and an age-group-based analysis of the perception of the preparatory work for potential future unification and found significant generational differences. Here, our results are in line with those of Cha et al. (2017) who also found that the normative necessity for unification is positively associated with age, as respondents aged 80+ lived through the Korean War (1950–53). These respondents are therefore likely to have a physiological attachment to the idea of one Korea. In fact, Park (2015) argued that a lack of consensus between the age groups might be the most severe obstacle in terms of potential preparation for unification.

Our results related to the role of income in the perception of the likelihood of the Korean unification are largely in line with other studies. For example, a recent South Korean study found that, compared to other groups, individuals who had a monthly income between KRW 3,500,000 (US$ 3000) and KRW 4,990,000 (US$ 4400) showed the most favourable attitudes towards Korean unification (Kim et al., 2017). The Gangwon residents' belief in the likelihood of near-future Korean unification can be partly explained by the fact that the super elderly group, who experienced Korea before division and

the process of division, tends to live more in the Gangwon area. A number of North Koreans who came down to South Korea during the Korean War settled in the Gangwon area.

Considering further regional differentials, those living in the SMA were found to be less likely to perceive the potential for near-future Korean unification, which might be due to a significant divide within the country between the SMA (where the economic growth is concentrated and where around 50% of the S. Korean population reside) and areas outside of SMA known as *jibang* [지방]. The population residing in the SMA is overall more highly educated and therefore more likely to hold a more informed view about the difficulties and timelines of such a political and socio-economic process.

The potential unification and regional differentials in the perception of the necessity for unification have implications for the possibility of a regional conflict. Based on recent results from a survey run by the Institute of Peace and Unification Studies (IPUS, 2021), in terms of perceived improvement of regional conflicts, expectations fell from 13.8% in 2007 to 6.8% in 2019 – the largest drop since the survey started in 2007. During the same time period, expectations for the improvement of ideological conflict fell from 15.9% to 10.7%. In addition, existing research highlights the possibility of intensifying conflicts between metropolitan and non-metropolitan areas, which in turn may have a negative impact on South Koreans' perception and attitude towards unification, and towards North Korean defectors (Cha, 2017). This existing analysis, as well as the results of the present study, implies that strong policy measures are required to mitigate any possibility of societal upheaval.

While this study advances our knowledge about the perception of Korean unification, it is not without limitations. For example, it might be useful in future studies to consider other indicators such as those measuring political affiliation. . Another limitation may be associated with the study's use of cross-sectional survey data. Since developing perception on unification takes a long time, using a single survey data necessarily restricts our understanding of the causalities of perception. By focusing only on the elderly group, the study is limited in what it adds to our understanding of the overall perception of unification among all population groups. The study does not deeply probe specific perceptions and attitudes related to perception of unification, instead focusing more on understanding the trend using secondary data as an early study to investigate the perception on unification among the elderly.

Further studies could therefore focus on investigating the perception of unification among other demographic groups such as the young. Such comparisons would be particularly pertinent given the generally acknowledged generational gaps in perceptions on this issue in South Korea. Additionally, analyses using longitudinal data could help with mapping temporal trends and changing underlying factors influencing the perception of unification. Finally, for a thorough analysis of spatial differentials, other methods such as geographically weighted regression should be used, if future editions of the survey or other data sources, allow such analyses.

Acknowledgments

References

Ahmed, S., Hasan, Z., Pongsiri, M., Ahmed, M.W. & Szabo, S. (2020). Impact of Extreme Weather Events on Injury, Disability, and Death in Bangladesh. *Climate and Development*, 13(4): 306-317. DOI: https://doi.org/10.1080/17565529.2020.1772705.

Cha, J.K. (2017). An Analysis on the Impact of Regional Conflict between Seoul-Metropolitan and Non-Seoul-Metropolitan Area on Citizen's Perception toward Reunification and North Korea. *Journal of Northeast Asian Studies*, 83: 215-238.

Chen, X. (2012). China's policy of unification of the Korean Peninsula. *Asia and Africa Review*, (5): 21-24

Glaser, B. S. & Sun, Y. (2015). Chinese attitudes toward Korean unification. I*nternational Journal of Korean Unification Studies*, 24(2): 71-98.

Ham, S.K. (2017). A study on change and determinants of South Koreans' Perceptions of Unification." MPA/MPP Capstone Projects. 273

Institute for Peace and Unification Studies (IPUS) (2021). 2020 Unification Perception Survey, Seoul National University, available at: https://ipus.snu.ac.kr/eng/wp-content/uploads/sites/2/2021/04/2020_%ED%86%B5%EC%9D%BC%EC%9D%98%EC%8B%9D%EC%A1%B0%EC%82%AC_pdf.pdf (Access 15 January 2022)

Jiyoon, K., Friedhoff, K., Chungku, K. & Euicheol, L. (2015). *South Korean Attitudes toward North Korea and Reunification*. Asan Public Opinion Report, The Asian Institute for Policy Studies, Seoul

Kim, D.Y. & Oh, H.J. (2001). Psychosocial aspects of Korean reunification: Explicit and implicit national attitudes and identity of South Koreans and North Korean defectors." *Peace and Conflict: Journal of Peace Psychology*, 7(3): 265-288

Kim, H. & Kim, S. (2018). A Study on the Opinions Towards Unification by Generation and Unification Education: Focusing on Unification Perception Survey. *The Journal of Humanities and Social sciences,* 21.

Kim, J., Kim, K. & Kang, C. (2018). South Korean Youths' Perceptions of North Korea and Unification. *The Asan Institute for Policy Studies Issue Brief*, 3: 1-14.

Kim, S., Heuijeong, K. & Jin, L.S. (2017). An Analysis of the Social Demographic Characteristics of the South Koreans According to their Views on Unification with North Korea. *Journal of education and culture*, 23: 27-48.

Korean General Research Survey (KGRS). (2013). Survey Research Center, Available at: http://kgss.skku.edu/, last accessed: 01.04.2021

Lee, W, Yoon, J-H., Koo, J-W., Chang, S-J., Roh, J. & Won, J-U. (2018). Predictors and estimation of risk for early exit from working life by poor health among middle and older aged workers in Korea. *Scientific reports*, 26;8(1): 5180.

Lee, Soonmi. (2014). The Influence of Participation in Old Age Education on the Consciousness and Behavior of the Elderly in Political Participation. Hanseo University Graduate School: 1-58.

Noland, M., Robinson, S. & Liu, L.G. (1998). The costs and benefits of Korean unification: Alternate scenarios. *Asian Survey*, 38(8): 801-814.

Park, S. (2015). The Difference Analysis of Portion Recognition and Age Classification on Basic Direction Unification Preparation: Focused on Peaceful Unification Consultant Member in Busan. *Korean Association of Unification Strategy*, 15: 103-127.

Rich, T.S. (2019). South Korean Perceptions of Unification: Evidence from an Experimental Survey. *Georgetown Journal of International Affairs*, 20(1): 142-149.

StataCorp. (2015). Stata statistical software: Release 15. StataCorp LP.

Szabo, S., Hossain, S., Matthews, Z., Lazar, A. & Ahmad, S. (2015). Soil salinity, household wealth and food insecurity in agriculture-dominated delta. *Sustainability Science*, 11: 411-421 DOI: https://doi.org/10.1007/s11625-015-0337-1.

The Guardian. (2019). Korean Peninsula will be united by 2045, says Seoul amid Japan row, Available at: https://www.theguardian.com/world/2019/aug/15/korean-peninsula-will-be-united-by-2045-says-seoul-amid-japan-row, (Access: 01.04.2021)

United Nations, Department of Economic and Social Affairs, Population Division (2019). World Population Ageing 2019: Highlights (ST/ESA/SER.A/430)